

## DECLARATION

As the below-named inventor, I declare that:

My residence, post office address, and citizenship are as stated below under my name.

I believe I am the original, first, and sole inventor of the invention entitled "METHOD AND APPARATUS FOR ENDPOINTING A CHEMICAL-MECHANICAL PLANARIZATION PROCESS," which is described and claimed in the foregoing specification and for which a patent is sought.

I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment specifically referred to herein (if any).

I acknowledge my duty to disclose information of which I am aware which is material to patentability and examination of this application in accordance with 37 C.F.R. § 1.56(a).

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that the making of willfully false statements and the like is punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and may jeopardize the validity of any patent issuing from this patent application.



Vishnu K. Agarwal

Date 20<sup>th</sup> August, 1998

Residence : City of Boise, County of Ada

State of Idaho

Citizenship : India

P.O. Address : 2463 East Red Cedar Lane #103  
Boise, Idaho 83716

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Vishnu K. Agarwal  
Filed : Concurrently herewith  
For : METHOD AND APPARATUS FOR ENDPOINTING A  
CHEMICAL-MECHANICAL PLANARIZATION  
PROCESS

Docket No. : 660073.671  
Date : July 22, 1998

Box Patent Application  
Assistant Commissioner for Patents  
2011 Jefferson Davis Highway  
Washington, DC 20231

ELECTION UNDER 37 C.F.R. §§ 3.71 AND 3.73 AND POWER OF ATTORNEY

Sir:

The undersigned, being Assignee of the entire interest in the above-identified application by virtue of an Assignment filed concurrently herewith, hereby elects, under 37 C.F.R. § 3.71, to prosecute the application to the exclusion of the inventor.

Assignee hereby appoints RICHARD W. SEED, Reg. No. 16,557; ROBERT J. BAYNHAM, Reg. No. 22,846; EDWARD W. BULCHIS, Reg. No. 26,847; GEORGE C. RONDEAU, JR., Reg. No. 28,893; DAVID H. DEITS, Reg. No. 28,066; WILLIAM O. FERRON, JR., Reg. No. 30,633; PAUL T. MEIKLEJOHN, Reg. No. 26,569; DAVID J. MAKI, Reg. No. 31,392; RICHARD G. SHARKEY, Reg. No. 32,629; DAVID V. CARLSON, Reg. No. 31,153; MAURICE J. PIRIO, Reg. No. 33,273; KARL R. HERMANNS, Reg. No. 33,507; DAVID D.

MCMASTERS, Reg. No. 33,963; ROBERT IANNUCCI, Reg. No. 33,514; MICHAEL J. DONOHUE, Reg. No. 35,859; CHRISTOPHER J. DALEY-WATSON, Reg. No. 34,807; STEVEN D. LAWRENZ, Reg. No. 37,376; ROBERT G. WOOLSTON, Reg. No. 37,263; ELLEN M. BIERMAN, Reg. No. 38,079; BRYAN A. SANTARELLI, Reg. No. 37,560; CAROL NOTTENBURG, Reg. No. 39,317; CRAIG S. JEPSON, Reg. No. 33,517; PAUL T. PARKER, Reg. No. 38,264; JOHN C. STEWART, Reg. No. 40,188; DAVID W. PARKER, Reg. No. 37,414; ROBERT E. MATES, Reg. No. 35,271; BRIAN G. BODINE, Reg. No. 40,520; FRANK ABRAMONTE, Reg. No. 38,066; E. RUSSELL TARLETON, Reg. No. 31,800; FREDERICK M. FLIEGEL, Reg. No. 36,138; JAN C. L. MAXWELL, Reg. No. 41,181; THOMAS L. EWING, Reg. No. 34,328; CLIFTON G. GREEN, Reg. No. 41,044; KEVIN S. COSTANZA, Reg. No. 37,801; DALE C. BARR, Reg. No. 40,498; KEVIN S. ROSS, Reg. No. P-42,116; PAUL F. RUSYN, Reg. No. P-42,118; JOHN M. WECHKIN, Reg. No. P-42,216; THOMAS E. LOOP, Reg. No. P-42,810; STEPHEN J. ROSENMAN, Reg. No. P-43,058; and BRIAN L. JOHNSON, Reg. No. 40,033, comprising the firm of SEED AND BERRY LLP, 6300 Columbia Center, Seattle, Washington 98104-7092; along with MICHAEL L. LYNCH, Registration No. 30,871; LIA M. PAPPAS, Registration No. 34,095; W. ERIC WEBOSTAD, Registration No. 35,406; WALTER D. FIELDS, Registration No. 37,130; CHARLES B. BRANTLEY, II, Registration No. 38,086; SUSAN B. COLLIER, Registration No. 34,566; KEVIN D. MARTIN, Registration No. 37,882; and DAVID J. PAUL, Registration No. 34,692, of Micron Technology, Inc., 8000 South Federal Way, Boise, Idaho 83706-9632, as its attorneys to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. Please direct all telephone calls to **John M. Wechkin** at (206) 622-4900 and telecopies to (206) 682-6031.

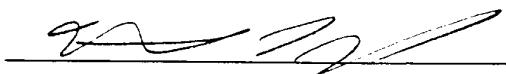
Please direct all communications to:

John M. Wechkin, Esq.  
Seed and Berry LLP  
6300 Columbia Tower  
701 Fifth Avenue  
Seattle, Washington 98104-7092

Pursuant to 37 C.F.R. § 3.73, the undersigned duly authorized designee of Assignee certifies that the evidentiary documents have been reviewed, specifically the Assignment to MICRON TECHNOLOGY, INC., filed concurrently herewith for recording, a copy of which is attached hereto, and certifies that to the best of my knowledge and belief, title remains in the name of the Assignee.

MICRON TECHNOLOGY, INC.  
ASSIGNEE

April 21, 1998  
DATE

  
Michael L. Lynch  
Chief Patent Counsel

Enclosure:  
Copy of Assignment

u:/johnw/660073/671/04

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
Vishnu K. Agarwal ) Docket No.: 660073.671  
 ) Disclosure Number: 97-0800  
 )  
 )  
 )  
Filed: Concurrently herewith )  
 )  
For: METHOD AND APPARATUS )  
FOR ENDPOINTING A )  
CHEMICAL-MECHANICAL )  
PLANARIZATION PROCESS )  
 )  
 )

## A S S I G N M E N T :

X Enclosed for recording  
\_\_\_\_ Previously recorded

Date: \_\_\_\_\_  
Reel: \_\_\_\_\_

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned does hereby:

SELL, ASSIGN AND TRANSFER to **Micron Technology, Inc.** (the "Assignee"), a corporation of Delaware, having a place of business at 8000 South Federal Way, Boise, Idaho 83706-9632, the entire right, title and interest for the United States and all foreign countries, in and to any and all improvements which are disclosed in the application for United States Letters Patent, which has been executed by the undersigned concurrently herewith and is entitled "**METHOD AND APPARATUS FOR ENDPOINTING A CHEMICAL-MECHANICAL PLANARIZATION PROCESS**"; such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such improvements; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States of America;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT that, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; and generally do everything possible which the Assignee shall consider desirable for securing, maintaining and enforcing proper patent protection for such improvements and for vesting title to such improvements in the Assignee:

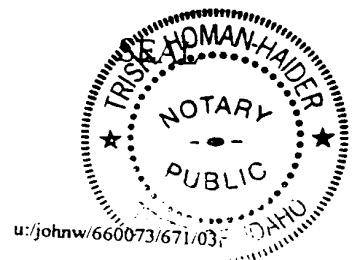
TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.

Vishnu K. Agarwal

Date: 20<sup>th</sup> Aug, 1998

STATE OF IDAHO )  
County of Ada ) ss.

BEFORE ME, this 30th day of August, 1998, personally appeared the above-named individual, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.



Trish Domay-Hailey  
Notary or Consular Officer  
My Commission Expires 3-26-2023

I hereby certify that on the date specified below, this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, DC 20231.

April 4, 2000  
Date

Michele Coleman-Owens

Michele Coleman-Owens

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant : Vishnu K. Agarwal	Attorney Docket No.: 660073.671 (500431.01)
Serial No. : 09/139,814	Group Art Unit : 1765
Filed : August 25, 1998	Examiner : G. Goudreau
Title : METHOD AND APPARATUS FOR ENDPOINTING A CHEMICAL-MECHANICAL PLANARIZATION PROCESS	

**TRANSMITTAL FOR REVOCATION AND SUBSTITUTE POWER OF ATTORNEY**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Transmitted herewith and attached hereto as Addendum A is a true and correct copy of the Revocation and Substitute Power of Attorney executed January 3, 2000, in the above-identified application. The above-identified application is identified on Exhibit A.

Pursuant to 37 C.F.R. § 3.73, Michael L. Lynch, duly authorized designee of Assignee, has certified that the evidentiary documents have been reviewed, specifically the Assignment to MICRON TECHNOLOGY, INC., recorded under Reel 9420 / Frame 0471, and certified that to the best of his knowledge and belief, title remains in the name of the Assignee.

Respectfully submitted,

DORSEY & WHITNEY LLP

*Mark W. Roberts*

Mark W. Roberts, Ph.D.  
Registration No. 46,160

Enclosures:

Addendum A  
Exhibit A

1420 Fifth Avenue, Suite 3400  
Seattle, Washington 98101-4010  
(206) 903-8800 (telephone)  
(206) 903-8200 (fax)

**ADDENDUM A**

**THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Assistant Commissioner for Patents  
Washington, DC 20231

**REVOCATION AND SUBSTITUTE POWER OF ATTORNEY**

Sir:

In the matter of the patent applications identified in Exhibit A attached hereto, I, MICHAEL L. LYNCH, declare that I am a duly authorized designee of Micron Technology, Inc., the ASSIGNEE of the entire right, title and interest in and to the above-referenced patent applications. Documentary evidence of chain of title from the original owner to ASSIGNEE has been or is concurrently being filed with and recorded by the United States Patent Office. The evidentiary documents referred to in the instant Revocation and Power of Attorney have been reviewed by the undersigned, and it is certified that, to the best of ASSIGNEE's knowledge and belief, title is held solely in and by ASSIGNEE.

On behalf ASSIGNEE, I revoke all power of attorney heretofore given, and hereby appoint EDWARD W. BULCHIS, Reg. No. 26,847; JON F. TUTTLE, Reg. No. 25,713; PAUL T. MEIKLEJOHN, Reg. No. 26,569; GLENN P. RICKARDS, Reg. No. 29,428; DALE C. BARR, Reg. No. 40,498; KIMTON N. ENG, Reg. No. 43,605; DAVID E. BOONE, Reg. No. 27,857; SCOTT W. DOYLE, Reg. No. 39,176; REED R. HEIMBECHER, Reg. No. 36,353; JOHN T. KENNEDY, Reg. No. 42,717; GREGORY D. LEIBOLD, Reg. No. 36,408; GARY M. POLUMBUS, Reg. No. 25,364; THOMAS H. YOUNG, Reg. No. 25,796; W. ROBINSON H. CLARK, Reg. No. 41,530; GREGORY J. GLOVER, Reg. No. 34,173; JOHN K. HARROP, Reg. No. 41,817; CHRIS McWHINNEY, Reg. No. 42,875; ALDO NOTO, Reg. No. 35,628; MATTHEW PHILLIPS, Reg. No. 43,403; JOHN W. RYAN, Reg. No. 33,771; AMI P. SHAH,

Reg. No. 42,143; SEAN S. WOODEN, Reg. No. 43,997; MICHAEL C. GILCHRIST, Reg. No. 40,619; BRIAN J. LAURENZO, Reg. No. 34,207; SHANE COLEMAN, Reg. No. 44,623; RONALD J. BROWN, Reg. No. 29,016; DAVID E. BRUHN, Reg. No. 36,762; DAVID N. FRONEK, Reg. No. 25,678; JOSEPH F. HAAG, Reg. No. 42,612; STUART R. HEMPHILL, Reg. No. 28,084; GRANT A. JOHNSON, Reg. No. 42,696; KENNETH E. LEVITT, Reg. No. 39,747; NIALL A. MACLEOD, Reg. No. 41,963; SCOTT A. MARKS, Reg. No. 44,902; DEVAN V. PADMANABHAN, Reg. No. 38,262; GERALD H. SULLIVAN, Reg. No. 36,311; BRIAN PARK, Reg. No. P-45,519; MARK W. ROBERTS, Reg. No. P-46,160; STEVEN H. ARTERBERRY, Reg. No. P-46,314; of the firm of DORSEY & WHITNEY LLP; along with MICHAEL L. LYNCH, Reg. No. 30,871; LIA M. PAPPAS, Reg. No. 34,095; WALTER D. FIELDS, Reg. No. 37,130; CHARLES B. BRANTLEY, II, Reg. No. 38,086; KEVIN D. MARTIN, Reg. No. 37,882; and DAVID J. PAUL, Reg. No. 34,692, of MICRON TECHNOLOGY, INC., 8000 South Federal Way, Boise, Idaho 83706-9632, as its attorneys to transact all business in the Patent and Trademark Office connected therewith.

Please direct all future correspondence and telephone calls to:

Edward W. Bulchis  
DORSEY and WHITNEY LLP  
U.S. Bank Centre, Suite 3400  
1420 Fifth Avenue  
Seattle, Washington 98101  
(206)903-8800  
(206)903-8820 facsimile.

ASSIGNEE:

Micron Technology, Inc.

Jan 3, 2000  
Date

By

  
Michael L. Lynch  
Chief Patent Counsel

EXHIBIT A

09/139,814	660073.671	Vishnu K. Agarwal	25-Aug-98	Method and Apparatus for Endpointing a Chemical-Mechanical Planarization Process
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